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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,239	08/22/2003	Stefan Bertil Ohlsson	2002B117/2	9391

23455 7590 01/05/2006

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EXAMINER

BRUENJES, CHRISTOPHER P

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 01/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/646,239

Applicant(s)

OHLSSON, STEFAN BERTIL

Examiner

Christopher P. Bruenjes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 56-83 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 56-83 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

WITHDRAWN REJECTIONS

1. All the rejections of claims 1-55 are withdrawn due to the fact the claims have been cancelled.
2. The 35 U.S.C. 112 rejections of claims 56-57 of record in the Office Action mailed August 17, 2005, Pages 2-4 Paragraph 4, have been withdrawn due to Applicant's arguments in the Paper filed November 17, 2005.
3. The 35 U.S.C. 102 rejections of claims 56-57 as anticipated by Takahashi et al of record in the Office Action mailed August 17, 2005, Pages 5-6 Paragraph 3, have been withdrawn due to applicant's amendments in the Paper filed November 17, 2005.

Claim Objections

4. Applicant is advised that should claim 57 be found allowable, claim 73 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the

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other as being a substantial duplicate of the allowed claim.

See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 74-80 are rejected under 35 U.S.C. 102(b) as being anticipated by Lue et al (USPN 6,255,426).

Regarding claims 74-79, Lue et al anticipate a multilayer stretch film comprising at least two layers (col.12, l.17). At least one of the layers comprises polyethylene copolymer having a CDBI of at least 70%, a melt index of from 0.1 to 15 g/10min, a density of from 0.910 to 0.930 g/ml, a melt index ratio of from 35 to 80, and an Mw/Mn ratio of from 2.5 to 5.5 wherein the film has a dart impact strength D, a modulus M, where M is the arithmetic mean of the machine direction and transverse direction 1% secant moduli, and a relation between D in g/mil and M in psi such that D is greater than or equal to $2.0 \times [100 + e^{(11.71 - 0.000268 \times M + 2.183 \times 10^{-9} \times M^2)}]$, which is equivalent to the

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formula claimed (see abstract and col.4, 1.48-50 and 1.60).

Regarding claims 1-10, 24-30, and 39-41, note the limitation

"wherein the film has a natural draw ratio of at least 250% or 300%, a tensile stress at the natural draw ratio of at least 22 or 26MPa, and a tensile stress at second yield of at least 12MPa or 14MPa" does not require the film to actual be drawn or stretched, it merely states that the film has these properties.

In this case, because the film of Lue et al has the exact same composition and is made by the same process, the film inherently has the same natural draw ratio and tensile stress values at the same elongation values, because if the composition is physically the same it must have the same properties. See MPEP 2112.01.

Therefore, the natural draw ratio of the film is inherently at least 300%, the tensile stress at the natural draw ratio is inherently at least 26MPa, the tensile stress at the second yield is at inherently at least 14MPa, the tensile stress at first yield is inherently at least 9MPa, and the film inherently has a yield plateau with a linear portion having a slope of at least 0.020 MPa per %elongation. Regarding claim 80, the film is wrapped around articles when used as garbage and shopping bags or shrink film (col.10, 1.57-59).

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7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 74-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lue et al in view of Wong et al (USPN 6,358,457).

Lue et al anticipate a multilayer stretch film comprising at least two layers (col.12, 1.17). At least one of the layers comprises a polyethylene copolymer having a CDBI of at least 70%, a melt index of from 0.1 to 15 g/10min, a density of from 0.910 to 0.930 g/ml, a melt index ratio of from 35 to 80, and an

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Mw/Mn ratio of from 2.5 to 5.5, wherein the film has a dart impact strength D, a modulus M, where M is the arithmetic mean of the machine direction and transverse direction 1% secant moduli, and a relation between D in g/mil and M in psi such that D is greater than or equal to $2.0 \times [100 + e^{(11.71 - 0.000268 \times M + 2.183 \times 10^{-9} \times M^2)}]$, which is equivalent to the formula claimed (see abstract and col.4, 1.48-50 and 1.60). The CDBI is at least 85% (col.9, 1.43). The melt index is from 0.3 to 10 g/10min (col.4, 1.57). The film is wrapped around articles when used as garbage and shopping bags or shrink film (col.10, 1.57-59).

Lue et al fail to explicitly teach that the film has a particular natural draw ratio, and tensile stress at separate elongation values. Note the limitation "wherein the film has a natural draw ratio of at least 250%, 275%, or 300%, a tensile stress at the natural draw ratio of at least 22, 24, or 26MPa, and a tensile stress at second yield of at least 12MPa or 14MPa" does not require the film to actually be drawn or stretched, it merely states that the film has these properties. Wong et al teach that the natural stretch ratio is determined by factors such as the polymer composition, morphology caused by the process of forming the film (col.7, 1.4-7). In this case, the film of Lue et al has the exact same composition and is made by the same process. Lue et al teach that the film is used as a

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shrink film (col.10, 1.57), which obviously must be stretched in order to allow the film to shrink.

Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made, since the film is formed of the same composition and made by the same process, would obviously have a natural draw ratio of the film of at least 300%, a tensile stress at the natural draw ratio of at least 26MPa, a tensile stress at the second yield of at least 14MPa, a tensile stress at first yield of at least 9MPa, and the film obviously has a yield plateau with a linear portion having a slope of at least 0.020 MPa per %elongation, as taught by Wong et al.

10. Claims 56-73 and 81-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lue et al alone or in combination with Wong et al in view of Takahashi et al (EP 982 362).

Lue et al alone or in combination with Wong et al teach all of the limitations of claims 56 as shown above with regard to claim 74, except that the multilayer stretch film comprises a surface layer on either side of the polyethylene copolymer containing layer. However, Takahashi et al teach that it is well known that packaging films are formed from polyethylene copolymers as monolayer films or multilayer films (p.34, 1.28-

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30). Takahashi et al also teaches other layers are added to polyethylene copolymer films in order to provide additional properties, such as making one surface of the film tacky and the other non-tacky. Takahashi et al teach that in order to provide these properties two additional layers are used, one on either side, of the polyethylene copolymer film (p.34, 1.31-39). One of ordinary skill in the art at the time Applicant's invention was made would have recognized that a layer is added on either side of a polyethylene copolymer film used in packaging in order to give that film one tacky surface and one non-tacky surface, as taught by Takahashi et al.

Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to form the film of Lue et al having more than one layer, as a three layered film with the polyethylene copolymer forming the intermediate layer, depending on the intended end result of the film, as taught by Takahashi et al.

Regarding claims 56 and 73, Lue et al teach that the film is wrapped around articles when used as garbage and shopping bags or shrink film (col.10, 1.57-59).

Regarding claims 58, Lue et al teach that the film has a dart impact strength D , a modulus M , where M is the arithmetic mean of the machine direction and transverse direction 1% secant

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moduli, and a relation between D in g/mil and M in psi such that D is greater than or equal to $2.0 \times [100 + e^{(11.71 - 0.000268 \times M + 2.183 \times 10^{-9} \times M^2)}]$, which is equivalent to the formula claimed (see abstract and col.4, 1.48-50 and 1.60).

Regarding claims 59-64, Lue et al inherently teaches or renders these limitations obvious over Wong et al as presented above with regards to claims 74-80.

Regarding claims 65-66, Lue et al teach that the CDBI is at least 85% (col.9, 1.43).

Regarding claim 67, Lue et al teach that the melt index is from 0.3 to 10 g/10min (col.4, 1.57).

Regarding claim 68-72, Lue et al teach that the density is from 0.910 to 0.930 g/ml, a melt index ratio is from 35 to 80, and an Mw/Mn ratio is from 2.5 to 5.5 (see abstract).

Regarding claims 81-83, the film in the form of a shrink film is wrapped around an article before shrinking, and that film must be pre-stretched before shrinking, therefore, a stretching force must be applied to the film before the step wrapping the article with the film if the film is made to shrink onto the article.

ANSWERS TO APPLICANT'S ARGUMENTS

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11. Applicant's arguments regarding the 35 U.S.C. 112 rejections of record have been considered but they are moot since the rejections have been withdrawn.

12. Applicant's arguments regarding the 35 U.S.C. 102 rejections of claims 56-57 as anticipated by Takahashi et al have been considered but are moot since they have been withdrawn.

13. Applicant's general arguments regarding the newly submitted claims over Takahashi or Lue have been considered but they are not persuasive.

See the new rejections presented above in regard to the Applicant's argument that the limitations in the newly presented claims are not taught by Takahashi or Lue alone or in combination.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

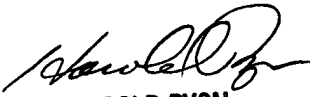
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Bruenjes whose telephone number is 571-272-1489. The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher P Bruenjes
Examiner
Art Unit 1772
CPB
December 27, 2005


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

1/3/06